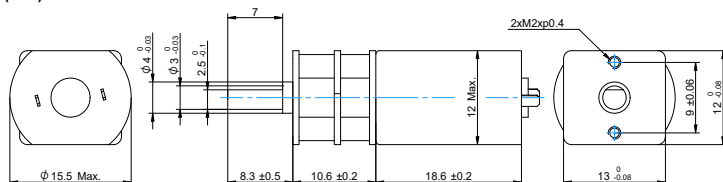


DRAWING (mm)



MODEL NO. DESIGNATION

SDS1319

- VOLTAGE

- GEAR RATIO

- F

E

Example: SDS1319-12-10-FE

PHOTO



ACCESSORIES



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

GEAR MOTOR DATA

C

Gear ratio		10:1	21:1	34:1	59:1	75:1	105:1	146:1	203:1	257:1	294:1	360:1
Nominal torque ^ gearbox limit	mNm	3.4	6.9	11	17	22	30	37	52	67	77	93
Nominal speed	rpm	870	400	260	150	120	83	59	43	34	29	24
Peak torque	mNm	59	88	88	150	150	240	240	290	290	290	290
Nominal power	W	0.31	0.30	0.30	0.27	0.28	0.26	0.23	0.23	0.24	0.23	0.23
Gearbox efficiency	%	81	73	73	66	66	66	59	59	59	59	59
Gearbox length L	mm	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	11
Weight	g	15	15	15	15	15	15	15	15	15	15	15

OTHER GEAR MOTOR DATA

C

Service life	h	500
Performance tolerances	%	±15
Operating temperature	°C	-10 to 60
IP rating		IP20
Manufacturing standard		ISO 9001 ISO 14001 TS 16949
CE label UL label		No No

GEARBOX DATA

C

Backlash no load	°	≤ 1.5
Radial load	N	≤ 3.9
Shaft axial load	N	≤ 2
Shaft press fit force max.	N	≤ 20
Radial play ¹	mm	≤ 0.06
Thrust play	mm	≤ 0.2
Bearing type		Sleeve bearing
Shaft material		Carbon steel AISI 1144
Motor pinion material		Bronze
Motor pinion shape		Straight
Material gear stage ²		Bronze, steel
Direction of rotation		CW or CCW by reversed V polarity
Assembly front bell	mm	0.8

MAGNETIC ENCODER DATA

C

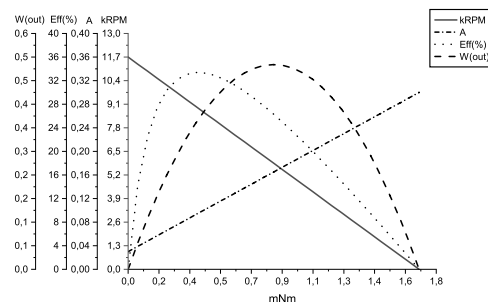
Pulses per revolution		3 x 2
Channels		2
Phase shift	°	90 ± (1/6)T
Encoder rear cover material		None
Sensor technical data		Refer externally to brand and part UTC-SK1816.
Size	mm	Diameter 7 Length 6
Harness connector		JST ZHR-6 P=1.5-6P
Harness cable		AWG26 UL1061
Harness length	mm	100
Connection		BLK M- RED M+ BRN Vcc GRN GND BLU A VIO B
Supply voltage	V	Min. 5 Max. 20
Supply current	mA	Ref. 5 Max. 10
Open collector output		Requires external output resistors.
Output current per channel	mA	-

BRUSHED DC MOTOR DATA

C

Nominal voltage	V	12
No load speed	rpm	12000
No load current	mA	≤ 30
Nominal speed	rpm	8800
Nominal torque	mNm	4.4
Nominal current	mA	≤ 100
Nominal power	W	0.4
Stall torque	mNm	1.7
Starting current	A	0.3
Motor commutation		Prec.m. ³
Motor rotor		Iron
Motor stator		Ferr.m. ⁴
Varistor EMC	V	17 - 26
Capacitor EMC	V	None
Resistance	Ω	45
Inductance	mH	9.5
Insulation class		B

BRUSHED DC MOTOR DATA GRAPH



NOTES

- 1.5 mm from gear flange.
- Contact us for information regarding gear stage material of a specific gear ratio.
- Precious metal.
- Ferrite magnet.